

REMARKS

Claims 48-55 are pending of which claims 48, 51, 53, 54 and 55 are independent. No claims have been added or deleted and no new matter has been added.

I. Objection to the Specification

The Examiner objected to the specification as failing to provide proper antecedent basis for the claimed subject matter of claims 51-53 (See Office Action, page 2, paragraph 4). The Examiner stated that the claimed subject matter of claims 51-53 was not present in the specification although it was found in originally filed claims 9, 10 and 15. While not agreeing with the Examiner's position, Applicants submit herewith replacement specification pages 1-14 to replace originally filed pages 1-13. Replacement pages 1-14 include the content of originally filed claims 9, 10 and 15. Since this added description was found in originally filed claims 9, 10 and 15, it does not constitute new matter.

Applicants also wish to specifically note that they are amending the specification in an effort to hasten prosecution and not as a result of agreement with the Examiner's position. While the detailed description as originally filed may not contain literal word for word support for claims 51, 52 and 53, Applicants submit that the original description as filed does adequately provide support for subject matter of claims 51-53.

II. Objections to the Claims

The Examiner objected to claim 51 due to an informality, the presence of a strikethrough in a new claim(See Office Action, page 3, paragraph 5). Applicants have amended claim 51 to remove the strikethrough of the letter 'a' noted by the Examiner.

III. Summary of Claim Rejections

Claims 48-55 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention(See Office Action, page 3, paragraph 7).

Claims 48-50 and 53-55 stand rejected under 35 USC §102(b) as being anticipated by Schatz et al (United States Patent Number 5,845,270, hereafter “Schatz”) (See Office Action, page 7, paragraph 9).

These rejections will be discussed separately below.

IV. Claim Rejections under 35 USC §112

Claim 48 has been amended to correct the antecedent basis issues noted by the Examiner. Claim 48 has also been amended to recite: “displaying on the display surface at least a portion of the second of the two block diagram models following the inserting of the copied functional differences and graphical differences in said second of the two block diagram models, the displaying of at least a portion of the second of the two block diagram models displaying at least some of the copied functional differences and graphical differences.” Applicants submit that the claim adequately recites where the differences will be placed.

Claims 49 and 50 have been amended to recite that the data elements being replaced in the second model are the “data elements that were determined as differences in said second of the two block diagram models.” Accordingly, Applicants submit that claims 49-50 indicate where the replaced data elements will be placed and how the data elements correspond to the differences of the parent claim.

The Examiner objected to claim 51 as incomplete for lacking essential steps. The Examiner stated that lines 16-17 do not state what happens when the distance is as large as said pre-defined parameter. Applicants respectfully traverse the objection. Claim 51 is directed to the situation where the distance is smaller than the pre-defined parameter. Claim 52 is directed to an alternate situation where the distance is as large as or larger than the pre-defined parameter. Applicants are under no responsibility to combine the two scenarios into a single claim.

The Examiner also objected to claim 51 as only reciting the display of “the line”. Applicants have amended claim 51 to recite that the line is displayed “as part of the display of the second of said two block diagram models.”

Claim 53 has been amended to recite “displaying at least a portion of said second of said state diagrams on the display following the inserting of said selected differences into said second of said state diagrams, the displaying of the at least a portion of said second of said state diagrams displaying at least some of the selected differences copied from said selected one of said state diagrams.” Accordingly, Applicants submit that claim 53 does claim where the differences will be placed and that the display of the second of the state diagrams is performed after inserting the differences and includes at least a portion of the diagram containing the differences. Applicants have also amended the claim to address the antecedent basis issues noted by the Examiner.

The Examiner also objected to the claim 53 element of “enabling a user to select some of said differences” under the stated premise that “some” includes “one” and if one were selected, the selection would render which differences were being copied unclear. Applicants respectfully traverse. The plain reading of the claim indicates that less than all of the graphical differences may be copied and therefore in the event only one of the differences was selected by the user, logically the selected difference must be a functional difference rather than a graphical difference. Any other interpretation would ignore the claim limitation.

Applicants have amended claim 54 to recite that the graphical differences are copied from the selected one of the block diagram models rather than from the second of the models into which the differences are inserted. Applicants have corrected the antecedent basis issue noted by the Examiner. Applicants respectfully traverse the Examiner’s finding that the use of the word “some” renders the claim unclear on the same basis as set forth for claim 53 above. Finally, Applicants have amended claim 54 to indicate that the second block diagram model is displayed after the insertions of the differences and the displaying includes a portion of the model that includes the differences.

The Examiner objected to claim 55 for using “some of said” in relation to the differences selected by the user. Applicants reassert the response set forth above with regard to this claim language as the use of “some” does not render the copying step unclear. Applicants have also amended claim 55 to indicate that the second block diagram model is displayed after the insertions of the differences and the displaying includes a portion of the model that includes the

differences. Applicants have further amended claim 55 to address the antecedent basis issue noted by the Examiner.

The Examiner additionally objected to claims 48-52, 54 and 55 as containing the term “block diagram models.” Applicants respectfully traverse. Applicants specification specifically notes that an underlying model is being displayed as an electronic diagram (see page 4, lines 27-28) and that the electronic diagram is created from a diagramming application capable of creating system diagrams such as block diagrams, state diagrams etc. (see page 4, lines 9-15). Applicants’ specification further recites SIMULINK software (a block diagram modeling environment) as an application that together with MATLAB represents a suitable diagramming application. Accordingly, Applicants submit that the specification includes adequate support for the claim term “block diagram models”.

V. Claim Rejections under 35 USC §102

Claims 48-50 and 53-55 stand rejected under 35 U.S.C. §102(b) as being anticipated by Schatz. The Applicants respectfully traverse this rejection.

Claim 48 as amended recites:

“In an electronic device interfaced with a display surface, a method, comprising:
providing two block diagram models, said block diagram models having blocks representing components of a system;
determining corresponding features of said block diagram models that are present in both of said block diagram models;
determining differences between said block diagram models;
categorizing said differences between said two block diagram models as functional differences and graphical differences, said functional differences controlling the performance of a system represented by said block diagram models, said graphical differences affecting the appearance of said block diagram model displayed to a user;
copying all of said functional differences from said selected one of said two block diagram models;

copying less than all of said graphical differences from said selected one of said two block diagram models;

inserting the copied functional differences and graphical differences into a second of the two block diagram models; and

displaying on the display surface at least a portion of the second of the two block diagram models following the inserting of the copied functional differences and graphical differences in said second of the two block diagram models, the displaying of at least a portion of the second of the two block diagram models displaying at least some of the copied functional differences and graphical differences.”

i. “Determining Differences Between Said Block Diagram Models”

Claim 48 is not anticipated by Schatz because Schatz fails to disclose the feature of “determining differences between said block diagram models,” as required by claim 48. In order to understand why Schatz does not disclose this limitation, it is helpful to review the disclosure of Schatz in some detail.

Schatz summarizes the invention disclosed therein as follows:

The present invention provides a method by which system objects and resource objects, and the relationships between the system objects and resource objects, are organized and summarized. The system objects, resource objects and relationships between the same may be utilized to create a network diagram for graphical analysis of the relationships between the system objects and resource objects. A user selects system objects from a plurality of classes, and selects attributes associated with the plurality of classes to organize the system objects. The system objects are then organized into groups according to the attributes. Resource objects potentially produced or consumed by the system objects are selected and the groups into which and out of which the resource objects potentially flow are identified. The resource objects and the group are organized in such a manner so as to identify between which groups and in what direction the resources flow. The system objects and resource objects are depicted in a network diagram as may be useful, e.g., in input/output modeling or analysis. It is another object of the present invention to provide a method for interconnecting two or more network diagrams to form a single merged network diagram. (Column 2, lines 25-46).

Schatz discloses that the network diagrams disclosed therein may be merged. Schatz notes that, “each of the network diagrams to be merged has its own underlying taxonomy tree of systems.” (Column 11, lines 22-23). Schatz also notes, “the trees and systems may be identical, overlapping, or mutually exclusive with respect to each other.” Schatz then discloses how the merger occurs for each of these cases. Specifically, Schatz states

“If the trees of systems are mutually exclusive, then the trees of systems are combined with a system u representing a universal tree of aggregate systems not found in either tree to form a new tree (unless the combination of both trees of systems includes all systems in the universal tree of systems, making this step unnecessary). Additionally, a new hypercube is formed combining the systems of both trees and system u and the resources of both original hypercubes.

If the trees of systems are overlapping, they necessarily share at least one system in common, in which case they are considered to be partially overlapping, and potentially share all systems in common, in which case they are considered to be completely overlapping. If the trees of systems are completely overlapping, then, just as described above in connection with mutually exclusive trees of systems, the trees of systems are combined with a system u representing a universal tree of aggregate systems not found in either tree to form a new merged tree, and a new hypercube is formed combining the systems of both trees and system u and the resources of both original hypercubes. However, duplicate systems in common between the trees are removed from the merged tube, as are the related cells in the new hypercube related thereto.

If trees of systems are partially overlapping, then new sub-systems are defined in each of the original taxonomy trees using new attributes to distinguish the sub-systems for each of the overlapping systems, thereby extending the original user defined taxonomy trees until all the systems are either mutually exclusive or exactly overlapping. Then, as is the case with completely overlapping trees of systems, the trees of systems are combined with a system u representing a universal tree of aggregate systems not found in either tree to form a new merged tree, a new hypercube is formed combining the systems of both trees and system u and the resources of both original hypercubes, and duplicate systems in common between the trees are removed from the merged tree, as are the related cells in the new hypercube related thereto. (Column 11, lines 30-67).

As the above quoted language from Schatz evidences, Schatz does not disclose “determining differences between said block diagram models,” as required by claim 48. In the case where the trees are mutually exclusive, the trees are combined with a system u that represents a universal tree of aggregate systems to form a merged tree. This

situation does not involve the determination of differences. In the case where the trees are completely overlapping, the trees are combined with a system u, representing a universal tree of aggregate systems to form a new merge tree. The duplicate systems in common between the trees are removed. In such a case, there is no determining of the differences between block diagram models. Lastly, in the case where there are overlapping trees, a new merged tree is formed combining the systems of both trees and the system u duplicate systems are removed. Schatz does not determine differences between block diagram models, rather it merges diagrams to form a new merged tree and eliminates duplicates. Therefore, Schatz does not disclose or suggest “determining differences between said block diagram models,” as required by claim 48.

ii. “Categorizing Said Differences Between Said Two Block Diagram Models as Functional Differences and Graphical Differences”

Schatz fails to disclose the feature of “categorizing said differences between said two block diagram models as functional differences and graphical differences.” As mentioned above, Schatz does not determine differences between block diagram models. In addition, Schatz does not categorize differences as functional differences and graphical differences. In this regard, the Examiner notes at page 9 of the Office Action:

“Schatz is teaching to one of ordinary skill in the art that a combined diagram may have less graphical elements than each of the individual diagrams have when view[sic]. A number of graphical or cosmetic elements may be absent such as spacing or white space between lines, blocks, etc. of the diagram, size of each of the lines, blocks, etc. of the diagram, and/or location of the lines, blocks, etc. of the diagram. These examples are not exclusive of other cosmetic/graphical differences that could be present in the merge diagrams taught by Schatz.

The Applicants respectfully submit that the Examiner’s position is incorrect. First, the claimed categorization features deals with the differences between the two initial electronic diagrams that are being merged and not differences between the resulting merged diagram and the diagrams being merged. Second, even if there are resulting differences in Schatz there is no “categorizing” of the differences as being either functional differences or graphical differences, as required by claim 48. Therefore, Schatz does not disclose or suggest “categorizing said differences between said two

block diagram models as functional differences and graphical differences,” as required by claim 48.

iii. “Inserting The Copied Functional Differences and Graphical Differences Into Said Second of Two Block Diagram Models”

Schatz fails to disclose the feature of “inserting the copied functional differences and graphical differences into said second of two block diagram models,” as further required by claim 48. In particular, Schatz does not disclose that the differences are copied into said second of said two block diagram models. Schatz creates a merged diagram (i.e., a third diagram) that contains the merged systems. In contrast, claim 48 recites that the copied differences are copied into “said second of said two block diagram models,” which is one of the two block diagram models that are initially provided.

For at least the reasons presented above for claim 48, Schatz does not support a valid 35 U.S.C. §102(b) rejection of claim 48. Applicants respectfully urge reconsideration of rejection of claim 48 and urge the Examiner to allow claim 48.

B. Claims 49 and 50

Claims 49 and 50 depend of independent claim 48. As such, claims 49 and 50 incorporate all of the limitations of claim 48. Accordingly, claims 49 and 50 are patentable for the reasons set forth above regarding claim 48. Applicants respectfully request reconsideration of the rejection of claims 49 and 50 and urge the Examiner to pass claims 49 and 50 to allowance.

C. Claim 53, 54 and 55

Applicants respectfully submit that claims 53, 54 and 55 are allowable for at least the reasons set forth above for claim 48. Claims 53, 54 and 55 all recite claim elements for determining differences between state diagrams/block diagram models, categorizing determining differences as functional differences or graphical differences and inserting copied differences into a second state diagram/block diagram model. As set forth above in the discussion of claim

48, these claim elements are not disclosed or suggested by Schatz. Accordingly, Applicants request the allowance of claims 53, 54 and 55.

Examiner's comments regarding claims 51 and 52

On page 14 of the Office Action, the Examiner indicated that a proper prior art search could not be made for claims 51 and 52 due to the use of the term "block diagram models". Applicants respectfully disagree with the statement. As discussed above, the term "block diagram models" is adequately supported in the specification. Accordingly, Applicants request the reconsideration of and allowance of claims 51 and 52.

CONCLUSION

In view of the above Amendment and remarks, Applicants believe the pending application is in condition for allowance.

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